Catalogue of American Amphibians and Reptiles.

Kerr, A.M., V.H. Zero, and R. Powell. 2006. *Ameiva erythrocephala*.

Ameiva erythrocephala (Shaw 1802)
Red-faced Ground Lizard, Orange-faced Ameiva

Lacerta Erythrocephala Shaw 1802:236. Type-locality, "St. Christopher." No holotype exists (see **Remarks**).

Ameiva punctata Gray 1838:277. Type-locality, "Demerara." Holotype, British Museum of Natural History (BMNH) 1946.8.30.40, collected by R.E. Sabine (not examined by authors). See **Remarks**.

Amiva erythrops Cope 1871:221. Type-locality, "St. Eustatius." Syntypes, Academy of Natural Sciences in Philadelphia (ANSP) 9892–9896 (apparently lost, fide Barbour and Noble 1915), collected by R.E. van Rijgersma, date of collection unknown.

Ameiva major var. *flaviceps* Bocourt 1874:246. Type-locality, "Cayenne." Holotype, Museum National d'Histoire Naturelle, Paris (MNHN) 4172, adult male, collector and date of collection unknown (not examined by authors). See **Remarks**.

Ameiva erythrocephala: Garman 1887:9. First use of present combination.

• **CONTENT**. No subspecies are recognized.

• **DEFINITION**. *Ameiva erythrocephala* is a moderately sized member of the genus; maximum known SVL of males = 140 mm (E.J. Censky and AMK, pers. obs.) and of females = 109 mm (Schwartz and Henderson 1991). Ventrals are in 10–12 (rarely 13) transverse rows and 31–38 longitudinal rows. Fourth toe subdigital scales number 70–92 (combined counts for both fourth toes); 15th caudal verticil scales number 33–42. Femoral pores number 56–78 (both legs). Dorsal caudal scales are keeled.

Dorsal and lateral ground coloration is dark olive green with black vermiculations that are darker on the flanks than on the dorsum. The head is dark olive green with a varying degree of red on the sides. This variation is a function of size and ranges from a slight pink cast at the snout in juveniles to a dark orange-red that extends from snout to behind the ears in large adults. The chin and throat are white, often with an orange cast. The venter is white, often with a bluish cast. Four narrow cream stripes that run the length of the body are present in juveniles: two dorsally and two ventrolaterally. These fade with age, first posteriorly and then anteriorly. The lateral three to four rows of ventrals are blue in larger adults of both sexes. In large males, the blue color extends onto the inner thighs and upper forearms.

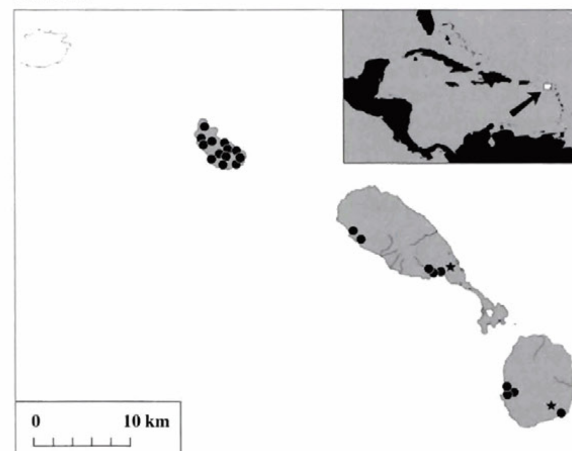
• **DIAGNOSIS**. *Ameiva erythrocephala* can be distinguished from all other extant Lesser Antillean congeners by having ≥ 36 femoral pores on one side (all other species have ≤ 33 femoral pores; Schwartz and Henderson 1985) and the distinct red sides of the face.



Figure 1. Adult male *Ameiva erythrocephala* from St. Eustatius (photographs by John S. Parmerlee, Jr.).

• **DESCRIPTIONS**. In addition to the originals (Shaw 1802, Cope 1871), descriptions with varying degrees of detail are in Garman (1887), Barbour and Noble (1915), Underwood (1962), Baskin and Williams (1966), Schwartz and Henderson (1991), and Powell et al. (2005).

• **ILLUSTRATIONS**. Rojer (1997), van Ditzhuijzen (2004), and Powell et al. (2005) provided color photographs. Powell and Henderson (2005) included a black-and-white photograph. Bocourt (1874, pl. XXB, fig. 8) provided a line drawing of the vent and caudal scales.



Map. The distribution of *Ameiva erythrocephala*: Dots indicate known locality records and stars mark fossil localities; the type-locality is too imprecise to plot. Modified from Schwartz and Henderson (1991). Some dots indicate several geographically proximate localitities.

• **DISTRIBUTION**. *Ameiva erythrocephala* is endemic to the St. Christopher (Kitts) Bank, where it occupies a variety of natural and altered habitats. The species is widely distributed on St. Eustatius and only locally abundant on St. Kitts and Nevis, although Malhotra and Thorpe (1999) indicated that these lizards were "scarce" on the latter two islands. The range was illustrated in Schwartz and Henderson (1991).

• **FOSSIL RECORD**. van der Klift (1992) and Wing and Scudder (1980) found remains of "*Ameiva* sp." in archaeological sites on St. Kitts, and Nokkert (2002) recorded *A. erythrocephala* in an archaeological site on Nevis.

• **PERTINENT LITERATURE**. Powell et al. (2005) provided a description and overviews of distribution, natural history, and conservation status. Additional references to the species include Barbour (1923), who synonymized *A. nevisana* Schmidt with *A. erythrops* Cope and indicated that both probably belonged in the synonymy of *A. erythrocephala*. Barbour (1930a) and Westermann (1953) indicated that the species was common on St. Kitts only in and around the community of Basseterre and attributed that pattern to predation by the mongoose. Presch (1971) discussed tongue morphology, Presch (1974a) included *A. erythrocephala* in a phylogenetic study of macroteiid lizards, and Presch (1974b) included the species in a study of dentition in macroteiid lizards. MacLean (1974) examined specimens of this species in a study of teiid functional morphology. Case (1978) provided a list of Lesser Antillean *Ameiva* and their maximum known sizes. Adolph and Roughgarden (1983) indicated that *A. erythrocephala* competes for prey with anoles to a greater extent than do birds. Censky and Paulson (1992) compared *Ameiva* from the northern Lesser Antilles. Henderson and Sajdak (1996) noted predation by *Alsophis rufiventris*. Crother (1999) provided an interpretation and diagram of evolutionary relationships based on Barbour and Noble (1915), in which *A. erythrocephala* or *A. erythrops* are both considered valid names. Hass et al. (2001) included the species in a study of relationships among West Indian amphibians and reptiles based on albumin immunology. Hower and Hedges (2003) assigned *A. erythrocephala* to the *A. plei* species group along with all other sampled Lesser Antillean congeners. Heinz et al. (2004) observed *Alsophis rufiventris* foraging in burrows presumably belonging to *Ameiva erythrocephala*. Kerr et al. (2005) examined natural history of a small population in severely altered habitat. Powell and Henderson (2005) noted that the species appears to be doing well on mongoose-free St. Eustatius, but is essentially restricted to heavily trafficked "urban" areas on St. Christopher and Nevis.

The species, as either *A. erythrocephala* or *A. erythrops* or under a common name, has been included in faunal lists, keys, and checklists (some of which include brief descriptions) by Barbour (1930b, 1935, 1937), Barbour and Noble (1915), Boulenger (1885), Censky and Kaiser (1999), Frank and Ramus (1995), Hutchins et al. (2003), Kruythoff (1938), MacLean et al. (1977), Malhotra and Thorpe (1999), Powell et al. (1996), Roughgarden (1995), Rojer (1997), Schwartz and Henderson (1985, 1988, 1991), Schwartz and Thomas (1975), Sokolov (1988), Underwood (1962), and van Ditzhuijzen (2004).

• **REMARKS**. Williams (1999) indicated that Daudin (1802) described *Ameiva erythrocephala* "from a very detailed letter sent by M Badier to Lacépède," which "included measurements and diet as well as colors in life." Williams (1999) went on to say that "the requirement for an actual specimen in the hands of the describer was not understood at this time, certainly not by Daudin." Smith and Patrick (1999) pointed out, however, that Shaw (1802) described this species at least seven months prior to Daudin (1802), and therefore "Daudin's name is a junior synonym of *Lacerta erythrocephala* Shaw."

Barbour (1914) stated that *A. erythrocephala* and *A. erythrops* may refer to the same form. He also clearly noted that the "mainland" forms (*A. major* and *A. punctata*) should not be considered conspecific with specimens from the St. Kitts Bank. However, Baskin and Williams (1966) noted that Bocourt (1874) separated *Ameiva major* var. *flaviceps* (which was identical to *A. erythrocephala*) from other populations grouped under his *A. major*, and that the similarity of this single specimen might have been responsible for Boulenger (1887) placing *A. major* and *A. punctata* in the synonymy of *A. erythrocephala*, "a judgment otherwise impossible to justify."

Baskin and Williams (1966) also noted that Bocourt's (1874) type locality, "Cayenne," was evidently only a shipping point. Breuil (2002, 2003) agreed that the locality data were in error and that the name, *Ameiva major*, should not be applied to *A. erythrocephala*, but differed in suggesting that the name may have been correctly applied to a distinct West Indian form from Petite Terre, now extinct.

Schmidt (1920) named *A. nevisana*, presumably from Nevis, where only *A. erythrocephala* is known to occur. Baskin and Williams (1966) examined the type specimen of *A. nevisana*, identified it as *A. griswoldi*, and indicated that Schmidt's locality was "undoubtedly incorrect." Lacépède (1789) listed the species as "Tete Rouge," without the Latin name.

Malnate (1971) listed ANSP 9072, 9074–9076 as syntypes of *Ameiva analifera* (= *A. plei analifera*). Those specimens were not mentioned by Cope (1871) in his original description. Censky and Paulson (1992) noted that those specimens represented *A. erythrocephala* and should not be listed as syntypes of *A. plei analifera*. Breuil (2002) cited Guibourt (1834), who indicated that F.L. L'Herminier undoubtedly encountered *A. erythrocephala* when he visted St. Christopher (St. Kitts).

• **ETYMOLOGY**. The specific epithet, *erythrocephala*, is from the Greek, erythros (= red) and kephale (= head) (Underwood 1962).

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